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Family living arrangements in young adulthood

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3 INTERGENERATIONAL CO-RESIDENCE OF YOUNG ADULTS WITH THEIR PARENTS ACROSS EUROPEAN REGIONS

This article proposes a multilevel framework in which regional differences in intergenerational co-residence of young adults with their parents are explained by individual characteristics, the socioeconomic and sociocultural context, and their cross-level interactions. Hypotheses are simultaneously tested with data for 45,385 individuals in 109 Western and Eastern European regions, obtained from the Generations and Gender Survey (GGS). Multilevel logistic regression results show that regional familialistic norms and the proportion of owner-occupied households are positively related to a young adult's propensity to co-reside. Young adults who more strongly endorse familialistic preferences are more likely to live with their parents, but the differences in terms of intergenerational co-residence across regions are bigger between young adults who less strongly endorse familialistic preferences. Young adults with greater socioeconomic resources are less likely to live with their parents, but the differences in terms of intergenerational co-residence across regions are bigger between young adults who have above average income. Thus, we have evidence that the regional sociocultural climate modifies the impact of individual preferences and resources. *

* This chapter is co-authored by Pearl A. Dykstra and Niels Schenk. A slightly different version of it has been re-submitted to an international peer-reviewed journal.

3.1 Introduction

Europe today differs markedly in the prevalence of intergenerational co-residence (young adults living with their parents). In Southern and Eastern Europe, it is quite widespread – with about 50% of young adults at age 20 to 24 living with their parents – while it is substantially lower in Northern and Western Europe (Iacovou and Skew 2011). A large body of research has examined intergenerational co-residence in Europe from a comparative perspective, but much of the discussion has been confined to broad country comparisons within Western Europe and only a small number of studies have systematically considered regional differences within countries (e.g., Aassve et al. 2013). We examine regional rather than cross-national differences in intergenerational co-residence across both West and East European countries and argue that it is also important to look at regional contexts – such as regional housing and economic conditions, and sociocultural climate. Moreover, to fully assess regional differences in intergenerational co-residence across Europe, we also have to recognize the interplay of regional context and young adults' individual characteristics. Comparative research suggests that the relationship between individual characteristics (e.g., income, education and employment status) and intergenerational co-residence differs across regional contexts (Aassve et al. 2002; Billari 2004; Iacovou 2001; Kalmijn and Saraceno 2008). We expect that in a sociocultural climate where intergenerational co-residence is common, the resources young adults have (such as income) and whether young adults prefer to co-reside, may matter less in determining their co-residence, compared to European regions with a sociocultural climate where intergenerational co-residence is uncommon.

Against this backdrop, we pose the following research questions: (1) To what extent do the individual characteristics (individual resources and preferences) and the regional context (i.e., housing market and sociocultural climate) explain regional differences in intergenerational

co-residence across Europe? (2) And how does the regional context modify the relationship between resources and preferences and intergenerational co-residence? To answer these questions, we will use data from the first Wave of the Generations and Gender Survey (GGS), a panel survey including regions from 14 Western, Central and Eastern European countries (Vikat et al. 2007), and draw on a multilevel framework.

Knowledge about intergenerational co-residence has become increasingly important in light of the demographic, social, and economic changes in contemporary Europe. Our study contributes to a better understanding of intergenerational co-residence in four ways. First, we focus on regional differences in intergenerational co-residence, which have rarely been studied. Studying the role of the regional context is essential because there are important sociocultural and socioeconomic within-country differences – such as, for example, labor and housing markets (Buchmann and Kriesi 2011; Mulder et al. 2002) and long-standing cultural differences in kinship norms (Chiuri and Del Boca 2010; Reher 1998) – that create a historically and socially specific situation, which in turn may well affect the level of intergenerational co-residence. Second, we use a multilevel framework for analyzing regional differences in intergenerational co-residence. This allows us to better understand the source of observed regional differences (i.e., the distribution of individual characteristics across regions, the regional context, or differential effects of individual characteristics by regions). Third, the role of the regional sociocultural context has been understudied in empirical research about intergenerational co-residence. Only few single-country and comparative studies have empirically tested how cultural differences across regions shape intergenerational co-residence (Aassve et al. 2013; e.g., Vitali 2010). This void warrants studying regional sociocultural climates and how they are shaping intergenerational co-residence in more detail. Fourth, we extend the research focus to Eastern Europe, where comparative studies on intergenerational co-residence are still scarce.

3.2 Theory and Hypotheses

3.2.1 Diversity of Intergenerational Co-residence across Individuals

The availability of socioeconomic resources is very likely to reduce the need to engage in material exchanges with one's parents. If young adults have, for example, a high personal income, they might be able to afford independent living and do not have to rely on their parents to provide housing. Studies have also shown that an unstable employment situation may be a reason of its own to co-reside in the parental household, as is being enrolled in education (Aassve et al. 2002). For Western Europe, previous research generally shows that economic constraints (e.g., having a low income and being unemployed) restrict young adults in setting up their own household – thereby making it more likely for these young adults to co-reside – and that thus cross-national differences in intergenerational co-residence are partly explained by the income composition of young adults across countries (Aassve et al. 2002; Iacovou 2010; Le Blanc and Wolff 2006). Some scholars have argued that the propensity to co-reside depends not only on young adults' socioeconomic resources but also on the resources of their parents, because greater resources of the parents may be used to help young adults to live independently (e.g., De Jong Gierveld et al. 1991). In this regard, parental education might also matter, because more highly educated parents not only have greater resources but also tend to have a greater need for privacy and are less likely to live together with their adult children (Avery et al. 1992).

Young adults' preferences, which are rooted in the norms and values regarding family relations, might be either in the direction of independence and autonomy or family closeness (Iacovou 2001, 2010). If young adults embrace traditional family values more strongly and hold familialistic attitudes, they are likely to have a preference for intergenerational co-residence, which in turn increases the propensity

to co-reside. Cross-regional studies are largely lacking and there is thus little evidence about how individual preferences are associated with intergenerational co-residence in general, and whether regional diversity in intergenerational co-residence is largely a composition effect of preferences. However, empirical findings of cross-national studies do not verify the positive effect of familialistic preferences on intergenerational co-residence. Tomassini et al. (2004) used familial attitudes and norms of filial obligation and care as a proxy for preferences and showed descriptively that there is considerable variation in attitudes toward acceptability and desirability of intergenerational co-residence which is mirrored by differences in living arrangements in Northern and Southern Europe. Scandinavians are, for example, less likely to endorse statements on family obligations for support and care than are residents of Mediterranean countries.

Other individual characteristics are known to play a role in intergenerational co-residence and need to be taken into account, too. Both partnership status and parenthood are important: Intergenerational co-residence is less likely for young adults who have a partner or children than for those who are single and childless, possibly due to desires of privacy outweighing benefits from living in the parental household (Chiuri and Del Boca 2010). As prior research suggests, if young adults have very young children themselves or if they are single parents, the need for support and assistance vis-à-vis intergenerational co-residence may be higher (Chambaz 2001). Young men live with their parents more often than young women (Chiuri and Del Boca 2010; e.g., De Jong Gierveld et al. 1991). This is arguably to a large extent because women have different partnership trajectories (i.e., they partner or marry at younger ages than men). It might also be due to differences in the level of parental supervision and monitoring men and women experience while living with their parents. Young adults furthermore more often live with their parents at younger than older ages (Iacovou 2010). Finally, some studies have indicated that poor health and disability increase the likelihood of intergenerational

co-residence (e.g., Smits et al. 2010) – at least for young adults aged 30 to 40. It is not unreasonable, however, that young adults aged 18 to 29, who have poor physical health, may be more likely than their healthier counterparts to live with their parents.

3.2.2 Diversity of Intergenerational Co-residence across Regional Contexts

Observed differences in intergenerational co-residence across European regions appear to be related to socioeconomic contexts such as housing markets, labor market conditions and economic opportunities that do or do not allow young adults independent household formation and may subsequently limit the choice of living arrangements (Aassve et al. 2002; Billari 2004; Chiuri and Del Boca 2007). Several studies have shown that housing and labor market conditions help explain cross-national differences in intergenerational co-residence (Chiuri and Del Boca 2007, 2010; Le Blanc and Wolff 2006; Mandic 2008). Few studies, however, have clarified the impact of such socioeconomic opportunities on the regional level (see as an example Vitali 2010). It may be reasonably expected that socioeconomic opportunities for young adults to set up an independent household vary across European regions. In regions where the availability of affordable housing allows young adults to leave the parental home at comparatively low costs and favorable economic and labor market conditions allow young adults to be economically independent, intergenerational co-residence should be less likely. In regions characterized by a high proportion of owner-occupied households, a high unemployment rate, and low mean income levels, intergenerational co-residence should be more likely (cf. Mulder 2006), because the frequency in housing turnover is lower and fewer houses are available for rent. The shortage of affordable housing and inadequacy of regional housing markets could therefore help to explain – over and above the effect of individual resources – why in some

European regions young adults and parents co-reside more often than in others.

Regional variation in intergenerational co-residence can also derive from the regional sociocultural climate (i.e., a system of normative expectations towards family living and kinship traditions) – specifically the extent to which the regional sociocultural climate embraces intergenerational co-residence as a cultural behavioral standard and prescribes that young adults should live with their parents. We argue that young adults in regions, where intergenerational co-residence is widespread and the cultural standard, are more likely to live with their parents. The rationale here is that young adults are not only led by their individual resources and preferences, but are also influenced by the normative regional context in which they are integrated. In the theoretical literature, a main distinction has been made between familialistic and individualistic sociocultural climates (Reher 1998). A familialistic climate captures more traditional family and kinship norms prioritizing supportive relationships from parents towards young adults that typically involve close contact and co-residence between the family members. An individualistic climate captures less traditional family and kinship norms favoring independent living of young adults and parents, thus stressing personal autonomy more. Scholars have emphasized the historical continuity of such sociocultural climates in Europe, which were preserved to varying degrees in distinct regions of this area until today (Hajnal 1965; Reher 1998). Previous research documents prolonged intergenerational co-residence to be much more prevalent in familialistic than in individualistic sociocultural climates. For example, in both Southern and Eastern Europe there has long been the custom of young adults continuing to live with their parents (Aassve et al. 2002; Ahmed and Emigh 2005; Kalmijn and Saraceno 2008). Yet, it is important to note that studies most often rather sketched variation in the levels of intergenerational co-residence across European countries than specified the influence of the sociocultural climate on young adults' propensity to co-reside (Saraceno 2008). Furthermore, few

comparative studies have paid attention to social, institutional, and cultural differences across regions (but see Vitali 2010 for an analysis of regions in Spain).

3.2.3 Diversity of Intergenerational Co-residence across Individuals and Regional Contexts

The previous theoretical arguments suggest that all young adults are influenced equally if they are living, for example, in familialistic regions. However, we argue that individual characteristics (i.e., individual resources and preferences) have a different weight in different regional sociocultural climates. The comparative literature has put some attention on how the relationship between individual characteristics and intergenerational co-residence differs across countries and how this may help explain cross-national differences (Aassve et al. 2002; Billari 2004; Iacovou 2001; Kalmijn and Saraceno 2008). Generally, these comparative studies have looked at political-economic or institutional contexts, such as welfare state regimes, for example. To our knowledge, however, research that empirically tests how the regional sociocultural context modifies the relationship between young adults' preferences and resources on intergenerational co-residence is virtually non-existent.

Although cultural standards are generally shared within a region as a whole, this does not necessarily mean that there are no exceptions. For example, young adults in familialistic sociocultural climates may very well not have an individual preference for living with their parents. However, normative expectations (e.g., whether or not to live with their parents) are typically enforced by various mechanisms of social control and backed up by sanctions (Liefbroer and Billari 2010). Sanctions can take different forms – ranging from stigmatization to social exclusion – and serve to prescribe (or proscribe), for example, whether or not young adults should live with their parents, and if and when they should leave the parental home (e.g., Billari and Liefbroer 2007). We assume that in familialistic regions, where intergenerational

co-residence is widespread and a strongly endorsed cultural standard, it is normatively difficult for young adults to live independently. In order to avoid social disapproval, young adults adhere to the sociocultural climate which partly offsets individual preferences for intergenerational co-residence and sufficient individual resources to live independently. For example, having only a weak preference to live with their parents or having a high income and socioeconomic status will have less relevance in solely determining intergenerational co-residence, because young adults avoid acting contrary to the regional sociocultural climate and keep living with their parents in familialistic regions. We therefore expect: The positive association between familialistic preferences and intergenerational co-residence will be weaker in regions characterized by strong familialistic norms (compared to regions characterized by strong individualistic norms) (H1). The negative association between individual resources and intergenerational co-residence will be weaker in regions characterized by strong familialistic norms (compared to regions characterized by strong individualistic norms) (H2).

3.2.4 A Multilevel Framework

Adopting a multilevel framework, we have argued that cross-regional differences in intergenerational co-residence can be explained in three ways (Figure 1). First, the distribution of young adults' resources and preferences, which in turn increase or decrease, respectively the likelihood to co-reside (Arrow 1), differs across European regions. If so, differences in the levels of intergenerational co-residence may be attributable to the unequal distribution of individual characteristics across regions (i.e., a compositional effect). Comparative studies of intergenerational co-residence have typically suggested that compositional effects of income and employment status (Aassve et al. 2002; Iacovou 2001, 2010; Le Blanc and Wolff 2006), education (Kalmijn and Saraceno 2008), and individual preferences (Billari and Liefbroer 2007) play an important role in explaining cross-national differences,

but whether or not regional differences can be explained this way remains an open issue.

Second, European regions themselves differ and contextual characteristics of the region may directly influence young adults' co-residence over and above the effects of resources and preferences (Arrow 2). Thus, the regional context – net of compositional effects – shapes intergenerational co-residence by establishing a set of opportunities and constraints within which young adults act. We are specifically referring to regional housing and economic conditions, and sociocultural climate to explain why in some European regions intergenerational co-residence is more pronounced than in others. Third, how resources and preferences affect intergenerational co-residence may vary by region (Arrow 3). Regional differences in intergenerational co-residence may then be due to the modifying effect of the regional context. In all cases, we make predictions about young adults' propensity to co-reside at the individual level, which then can be linked to aggregate outcomes in intergenerational co-residence on the regional level.

3.3 Data, Measures, and Method

3.3.1 Data

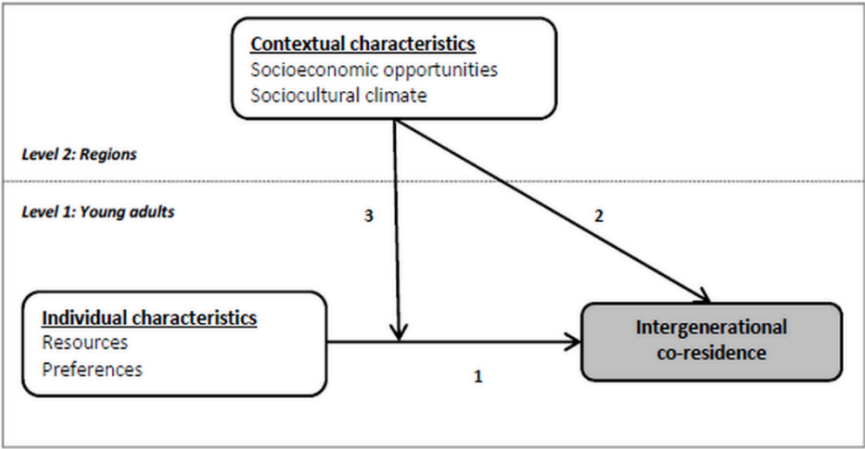
The data come from the first Wave of the Generations and Gender Survey (GGS), an internationally comparable and harmonized set of survey data (United Nations. Economic Commission for Europe and United Nations Population Fund 2005), and the GGS Contextual Database.¹ Each national survey has a sample size of about 10,000 individuals aged from 18 to 79 years of the non-institutionalized and resident population in each participating country. Currently data for 14 Eastern and Western European countries are available for data analyses. A particular advantage of the GGS data for the purpose of this analysis is that they include a broad range of Western and Eastern European countries which allows studying contemporary Europe. The

response rates vary between 41.8% (Belgium) and 83.9% (Romania) (Fokkema et al. 2016).²

For our analysis of cross-regional differences in young adults' propensity to co-reside, we use data from 109 regions in 14 Western and Eastern European countries classified according to the Nomenclature of Territorial Units for Statistics (NUTS), the European Union's official regional classification system.³ We work on different NUTS levels, that is, major regions of between 150,000 and 7 million inhabitants. However, in the case of Russia and Georgia – which are not part of the NUTS classification system – we consider the major administrative regions used in the GGS. In all, this provides an adequate social context of young adults' intergenerational co-residence with their parents. Table 3.5 in the Appendix 3 provides a full list of the countries and NUTS regions used in the analysis.

We limit the sample to respondents aged 18 to 35 years, because our interest focuses on intergenerational co-residence in young adulthood. Additionally, we exclude 409 observations of the initial sample because the response rate in the large metropolitan regions of Russia (St. Petersburg, Moscow, and Leningrad) was below 20% and the results were thus deemed not reliable. Because our sample suffered from missing data (see Table 3.1), we applied a simple univariate sampling imputation (hot deck) in order to include the maximum number of cases in the analysis. With this technique missing data are replaced by individual data drawn from similar responding units (Andridge and Little 2010). The imputations were performed separately for each country and missing values for individual income, for example, were replaced with the income of another respondent with similar characteristics, i.e., region of residence, age, sex, and educational attainment. This imputation technique is particularly well suited for income imputation with the GGS data because it preserves the overall income distribution.⁴

Figure 3.1 Schematic Outline of a Multilevel Framework of Intergenerational Co-residence



Source: Authors.

All restrictions left us with a total of 45,385 respondents in 109 regions in Western and Eastern Europe. The number of respondents per region ranges from 21 in Bremen (Germany) to 2,619 in Northern and Eastern Bulgaria (Bulgaria), and it is 416 on average.

3.3.2 Measures

Living with parents scored 1 if the young adult shared a household with at least one parent (= 0 if not). To measure the young adults' individual resources, we used *personal income* which was measured as the average net amount of monthly income or, if respondents could not answer this question, as the approximate range of monthly income.⁵ We constructed the monthly personal income by summing up the income (in cases where the range was reported we used the mean of the category) and dividing it by twelve. To correct for right skewness and to ensure comparability of the income variable across the countries in the sample, we subsequently used the logged and standardized income.

We use a scale composed of 10 questions on family values and attitudes to gauge the extent to which young adults hold *familialistic preferences*. Our purpose is to capture familialism across a range of values dimensions, such as attitudes and values on marriage, children, general family orientation, and public morality. We assume that young adults who hold more traditional and familialistic values and attitudes also have a preference for intergenerational co-residence. While there is no ex-ante reason for people's views on these diverse dimensions to correlate, the questions in the GGS rely on other existing surveys (e.g., European/ World Values Surveys) and have been tested (Vikat et al. 2007). Respondents answered these items on a 5-point Likert scale, varying from strongly disagree (= 0) to strongly agree (= 4). After coding the items in a single direction, the items were summed, with higher scores reflecting familialistic family values (Cronbach's alpha is .71).⁶

Sociocultural climate. Regional familialistic norms are aggregated from the individual GGS data using a similar measurement procedure as for the individual familialistic preferences (distinguishing one scale and using the same items and coding). We computed the average scores of respondents 45 or older as a measure of regional familialistic norms. We deliberately let the aggregate measure of the sociocultural climate reflect the familialistic attitudes of the older regional population in order to avoid confounding with young adults' individual preferences (see Jappens and Van Bavel 2012 for a similar procedure).⁷ *Housing market.* Because independent living arrangements of young adults generally require availability of affordable housing, we use the proportion of owner-occupied households in the region of residence (obtained from the GGS Contextual Database) as an indicator for the tightness of the regional housing market. *Labor market and economic opportunities.* We use the youth unemployment rate and regional youth mean income (obtained from Eurostat and aggregated from the GGS data, respectively) as indicators for regional labor market and economic opportunities. We centered the regional level indicators by

their grand mean, so that zero values correspond to the average scores across all regions in the sample.

Table 3.1 Descriptive Statistics

Variable	Min	Max	Mean	SD	Imputed
Individual level variables					
Living with parents			0.36	0.48	
Familialistic preferences (sum score)	0.10	4	1.95	0.57	4.41%
Income (ln. std.)	-7.91	5.75	0	1	19.17%
Student			0.22	0.42	
Having a partner			0.64	0.48	
Having a young child			0.42	0.49	
Single parent			0.05	0.22	
Male			0.46	0.50	
Age (std.)	-1.85	1.56	0	1	
Age (std. sq.)	0.00	3.43	1	0.92	
Mother has high education			0.17	0.37	5.13%
Poor health			0.14	0.35	
Regional level variables^a					
Familialistic norms (sum score)	1.54	3.02	2.13	0.30	
Owner-occupied households (%)	14.1	97.91	71.30	20.72	
Youth unemployment (%)	2.80	39.20	17.70	8.09	
Mean youth income	38.22	2406.04	671.21	678.17	

Source: GGS Wave 1 (2004–2011). N = 45,385.

Note: ^a Based on values before grand-mean centering.

We distinguish the following control variables: The young adult is still a *student* (= 1) or not (= 0), has a *partner* (= 1) or not (= 0), *has a child younger than 14 years* (= 1) or not (= 0), and is a *single parent* (= 1) or not (= 0). *Mother's high education* (= 1) is included as an indicator for socioeconomic resources in the parental household. We also include dummy variables indicating whether the young adult is *male* (= 1) or not (= 0), and has *poor health* (= 1) or not (= 0). Poor health refers to the young adult's self-reported general health. *Age* and *age squared* – to account for non-linearity of the age effect – are included, too. Age is centered so that the main effect is the age effect for a person of an average age. Table 3.1 lists means and standard deviations of the variables used in the analyses.

3.3.3 Method

We use multilevel logistic regression models to test our hypotheses, because they correct for the nesting of individuals within higher-level units (here: Regions), allow simultaneous modeling of regional and individual level effects, and provide correct estimates of the standard errors and *p*-values than normal regression analyses (Snijders and Bosker 2011). If we used a single level model for clustered data, the assumption of independence of observations would be violated, resulting in underestimated standard errors and inefficient estimates. Specifically, we use two-level logistic regression models where young adults are nested in regions, and with random intercepts and random coefficients at the level of regions. The random intercepts allow for intergenerational co-residence to vary among young adults and among regions. The random coefficients allow for the effects of income and familialistic preferences to vary randomly across regions. The latter is necessary to test a cross-level interaction, where the regional context modifies the effect of individual characteristics. Because the regions are also nested within countries – and regions thus cannot be treated as independent observations – we add country dummy variables to our models.⁸

3.4 Results

3.4.1 Descriptive Findings

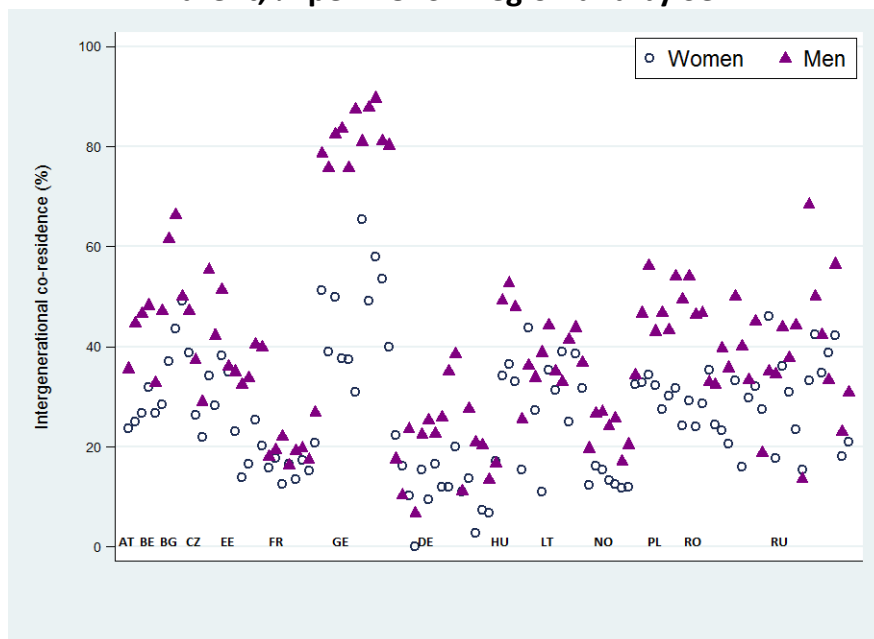
Figure 3.2 to Figure 3.4 illustrate the proportion of young adults living with at least one parent aggregated at NUTS level for three different groups: Men and women, young adults with and without a partner, and young adults aged 18–24 and aged 25–35. The three graphs reveal that much of the variation in intergenerational co-residence is situated between country borders along an East-West gradient, but also that variation in intergenerational co-residence is strongly linked to specific individual characteristics (e.g., not having a partner or being younger than 30) across countries and regions. Regional variation in intergenerational co-residence is not negligible, though. The percentages range from 4.8% to 72.4% for the whole sample and a test for equality of the 109 regional proportions provides evidence that the NUTS regions are significantly different from each other ($\chi^2 = 43,000$, $df = 108$, $p < .001$).

3.4.2 Hypothesis Testing

Table 3.2 presents the results of the final multilevel binary logistic regression model of intergenerational co-residence for the whole sample. Let us first consider the individual level variables of our model. We find that the more resources young adults have, the less likely they are to co-reside ($b = -0.16$, $s.e. = 0.02$, $p < .000$). More precisely, a 1 SD (= standard deviation) increase in the logged income decreases the odds of living with one's parents by 16.4%. Young adults who more strongly endorse familialistic preferences are more likely than those who less strongly endorse them to live with their parents across the 109 regions in the analysis ($b = 0.22$, $s.e. = 0.04$, $p < .000$). Being a single parent, a man, or a student increases the odds of living with one's parents, whereas having a partner, having young children or being older leads to young adults being less likely to live with their parents. Young adults with poor health are more likely to live with their parents and if young adults have

a mother who has a high level of education they are less likely to co-reside.

Figure 3.2 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 region and by Sex



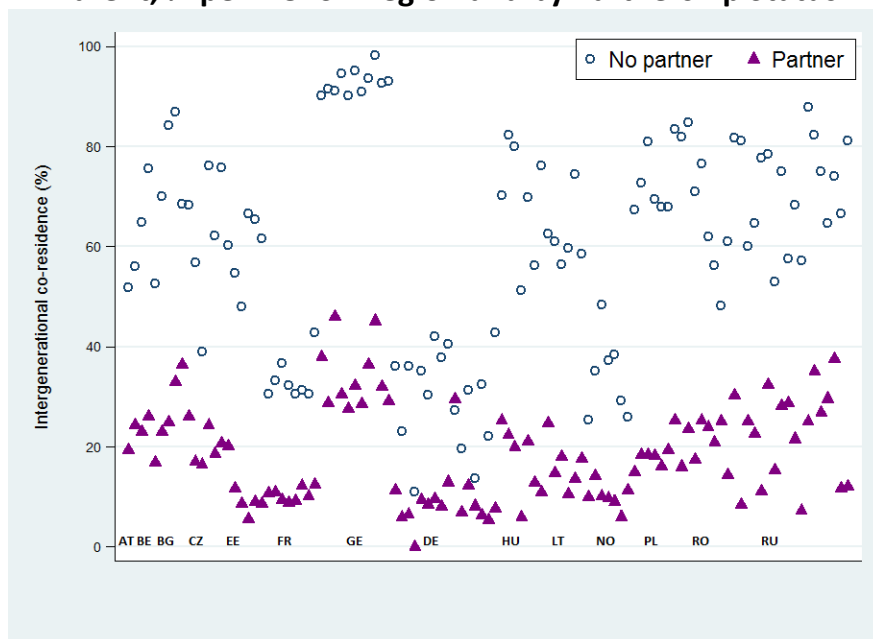
Source: GGS Wave 1 (2004–2011). Own calculations.

Note: AT = Austria; BE = Belgium; BG = Bulgaria; CZ = Czech Republic; EE = Estonia; FR = France; GE = Georgia; DE = Germany; HU = Hungary; LT = Lithuania; NO = Norway; PL = Poland; RO = Romania; RU = Russia.

Second, we examine if the regional context has an influence on intergenerational co-residence. The proportion of owner-occupied households is positively related ($b = 0.02$, $s.e. = 0.00$, $p < .000$) to a young adult's propensity to co-reside (Table 3.2). Young adults residing in regions with a more familistic sociocultural climate – compared to the average climate across all regions – are significantly more likely to live with their parents ($b = 0.90$, $s.e. = 0.42$, $p < .05$). The mean youth income is also linked to an increase in intergenerational co-residence.

The regional youth unemployment had no influence on the likelihood of intergenerational co-residence.

Figure 3.3 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 region and by Partnership Status



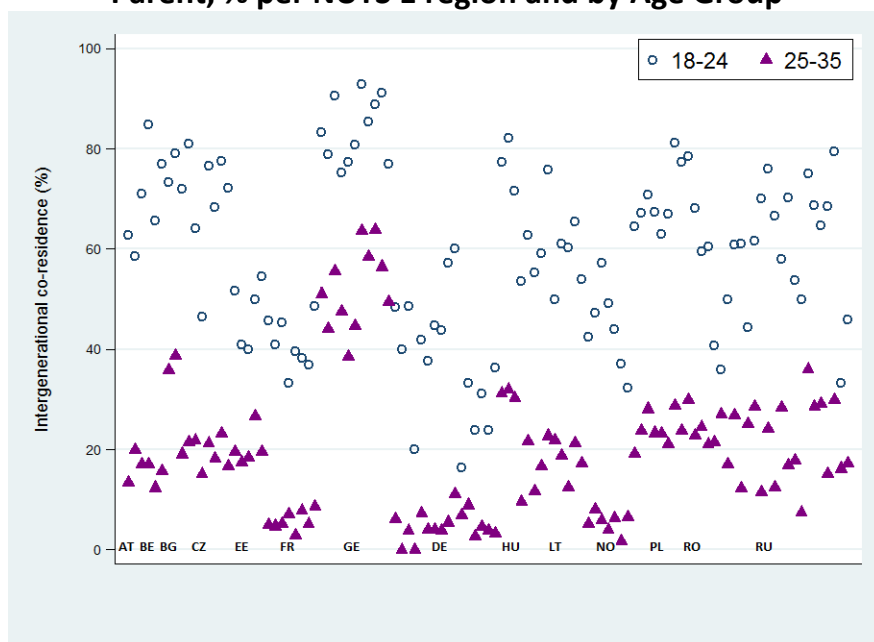
Source: GGS Wave 1 (2004–2011). Own calculations.

Note: AT = Austria; BE = Belgium; BG = Bulgaria; CZ = Czech Republic; EE = Estonia; FR = France; GE = Georgia; DE = Germany; HU = Hungary; LT = Lithuania; NO = Norway; PL = Poland; RO = Romania; RU = Russia.

Third, we examine if the regional sociocultural climate modifies the relationship of individual level variables. Note that in order to test H1 and H2, we allowed the coefficients of familialistic preferences and income to have a random slope and included cross-level interactions. Likelihood ratio tests confirmed that the effects of familialistic preferences and income, respectively, differ significantly across NUTS regions ($\chi^2 = 12.8$, $df = 3$, $p < .01$; $\chi^2 = 95.6$, $df = 3$, $p < .000$). We find support for H1, where we anticipated that the positive association between familialistic preferences and intergenerational co-residence

would be weaker in familialistic regions. As indicated by the significant interaction coefficient ($b = -0.22$, $s.e. = 0.10$, $p < .05$), the association between familialistic preferences and intergenerational co-residence is less positive in the most familialistic regions. Furthermore, we find in line with H2 that the negative association of income on intergenerational co-residence is weaker in more familialistic regions ($b = 0.39$, $s.e. = 0.08$, $p < .001$).

Figure 3.4 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 region and by Age Group



Source: GGS Wave 1 (2004–2011). Own calculations.

Note: AT = Austria; BE = Belgium; BG = Bulgaria; CZ = Czech Republic; EE = Estonia; FR = France; GE = Georgia; DE = Germany; HU = Hungary; LT = Lithuania; NO = Norway; PL = Poland; RO = Romania; RU = Russia.

To facilitate interpretation of the cross-level interactions, Figure 3.5 shows young adults' predicted probability to live with their parents (fixed effects only), when all other independent variables in the model are held at their mean. In the upper panel (A) of Figure 3.5, we see that the probability to co-reside increases for young adults living in regions characterized by strong familialistic norms – independently of their own familialistic preferences. This also means that differences in the probability to co-reside are bigger between young adults (of varying familialistic preferences) in regions characterized by weak familialistic norms. The lower panel (B) shows that a low income is positively associated with intergenerational co-residence – independently of the regional sociocultural climate. The association between income and intergenerational co-residence is mitigated by the sociocultural climate of the region with an increase in income. A high income is associated with intergenerational co-residence in regions characterized by strong familialistic norms, but not in regions characterized by weak familialistic norms.

Finally, to see if the cross-level interactions also hold for specific individual characteristics of young adults, we ran the model separately for three groups: men and women, young adults with and without a partner, and young adults aged 18–24 and aged 25–35, respectively (Tables 3.3 and 3.4). The results are quite consistent with our full model, we found no differences among these groups of young adults with respect to the modifying association between the sociocultural climate and income. There seem to be differences, however, with respect to the association between the sociocultural climate and familialistic preferences between men and women, although the coefficients did not reach statistical significance for men.

3.4.3 Model Comparison

In a first step, we estimated an empty model (i.e., a model with random intercepts only) to examine overall individual level and regional level variance and to test whether using a multilevel approach is justified.

The variance components indicate that between-region variance constitutes about 30.3% ($0.45 / [0.45 + 3.29]$) of the overall variance in young adults' propensity to live with their parents. We tested our successive models one by one (likelihood ratio tests) against each other and against the empty model. All models fit the data significantly better than a 1-level logistic model. The residual variance in the model with only the county dummies and control variables was 0.05 and was subsequently reduced to 0.03 in the model with contextual variables. Residual variance reduction is an imperfect method for assessing model improvement (Snijders and Bosker 2011), but it still suggests the fairly moderate explanatory power of regional level variables. We note, however, that a considerable amount of variation in young adults' propensity to co-reside is due to characteristics of the countries themselves.

3.5 Conclusion

Regional differences in intergenerational co-residence are the result of both compositional (of resources and preferences) and context effects. We note, however, that regional variation in intergenerational co-residence across European regions is moderate and a substantial share of the variation in intergenerational co-residence is situated between countries. Our findings indicate that (1) the distribution of individual resources (i.e., income) and preferences of young adults across regions partly accounts for differences in intergenerational co-residence and that (2) composition effects are somewhat more important than regional context effects. These results complement previous research documenting the educational and income-related composition of countries as a source of cross-national differences in family living arrangements (e.g., Billari 2004), but also show how individual preferences shape intergenerational co-residence across regions in Europe.

Table 3.2 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents

	Final Model		
	b		s.e.
Intercept	0.65	***	0.21
Individual level			
Familialistic preferences	0.22	***	0.04
Income (ln. std.)	−0.16	***	0.02
Student	0.08	*	0.04
Having a partner	−1.14	***	0.03
Having a young child	−1.61	***	0.04
Single parent	1.08	***	0.06
Male	0.61	***	0.03
Age (std.)	−0.71	***	0.02
Age (std. sq.)	0.26	***	0.02
Mother has high education	−0.22	***	0.04
Poor health	0.19	***	0.04
Country (ref. = Bulgaria)			
Russia	−0.48	*	0.20
Georgia	1.15	**	0.38
Germany	−2.37	***	0.32
France	−3.11	***	0.31
Hungary	−0.18		0.17
Romania	−0.95	***	0.23
Norway	−3.41	***	0.57
Austria	−1.29	**	0.41
Estonia	−1.14	***	0.17
Belgium	−1.02	**	0.35
Lithuania	−1.71	***	0.16
Poland	−1.00	***	0.23
Czech Republic	−0.68	**	0.25

Table 3.2 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents (cont.)

	Final Model		
	b		s.e.
Regional level			
Familialistic norms ^a	0.90	*	0.42
% Owner-occupied households ^a	0.02	***	0.00
% Youth unemployment ^a	0.00		0.00
Mean youth income ^a	0.00	**	0.00
Cross-level interactions			
Familialistic preferences x Familialistic norms	−0.22	*	0.10
Income x Familialistic norms	0.39	***	0.08
Variance of random effects			
var (Intercept)	0.03		0.05
var (Familialistic preferences)	0.03		0.01
var (Income (ln. std.))	0.03		0.01
-2logL	−37507.36		
N	45,385		

Source: GGS Wave 1 (2004–2011).

Note: *p < 0.05, **p < 0.01, ***p < 0.001. (No weight used) ^a Grand-mean centered.

Particularly differences in the regional sociocultural climate (i.e., familialistic norms) and socioeconomic context (i.e., housing-market conditions) matter in determining whether young adults across European regions live with their parents or not. This, again, complements empirical findings obtained through cross-national comparisons (Billari 2004; Mulder et al. 2002) and highlights that the regional context is relevant for understanding differences in intergenerational co-residence across Europe.

Unexpectedly, we do not find evidence that regional youth unemployment – which has been shown to be an important predictor of intergenerational co-residence (e.g., Chiuri and Del Boca 2007, 2010;

Vitali 2010) – adds an explanation for cross-regional differences. This could be due to the level of regional aggregation, which may be too large to capture effects. However, GGS data aggregated at considerably smaller units (e.g., municipal level) are currently not available.

The regional sociocultural context also modifies the effect of individual resources and preferences on intergenerational co-residence: (1) Preferences matter less in determining intergenerational co-residence in a familialistic sociocultural climate. Young adults – irrespective of their individual preferences and everything else being equal– are more likely to live with their parents in more familialistic regions. The differences in terms of intergenerational co-residence between young adults who live in the most and least familialistic regions, respectively, are bigger for those who hold less familialistic individual preferences. The results seem to be group-specific, however. (2) Resources (i.e., income) matter less in determining intergenerational co-residence in a familialistic sociocultural climate. Young adults – irrespective of their income and everything else being equal– are more likely to co-reside if they are living in familialistic regions. The differences in terms of intergenerational co-residence between young adults who live in the most and least familialistic regions, respectively, are bigger for those who have above average income. These results underline that incorporating theories of cross-level interaction and how individual characteristics have different weights in different sociocultural contexts help refine our understanding of differences in intergenerational co-residence across regions in Europe.

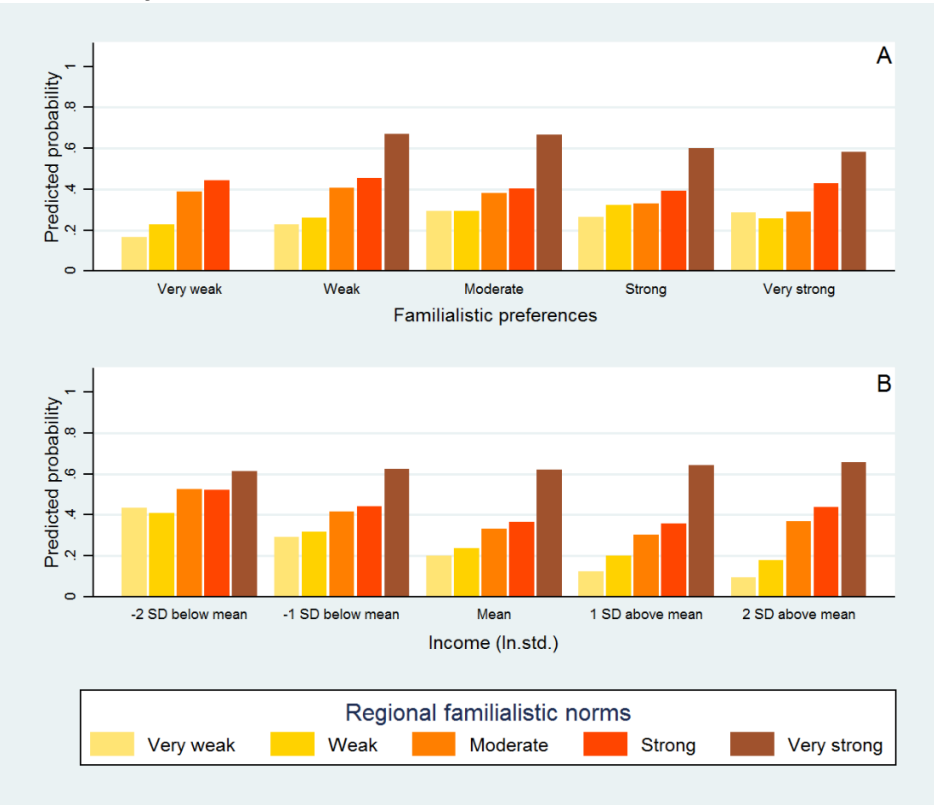
It is important to note several limitations of our research. First, we must caution not to draw causal inferences about intergenerational co-residence due to the cross-sectional design of our study. Reverse causality might exist between intergenerational co-residence and some of our predictors. It is possible, for example, that preferences are the outcome of intergenerational co-residence rather than determinants.

However, our focus is descriptive and does not lie with the estimation of causes of a transition to intergenerational co-residence.

Second, we note that we could not extensively tap into regional sociocultural climate. While our aggregate measure may in fact capture family norms of the older regional population, additional indicators would be desirable (e.g., regional proportion of non-marital cohabiting unions). Unfortunately, appropriate data were not available for the present study. Future research should consider refining the operationalization of the regional sociocultural climate. Third, we acknowledge that the number of countries is limited, although the inclusion of a broad range of Western and Eastern European countries is a major strength of the GGS data. It would be particularly interesting to expand the analysis to (more) Scandinavian and Southern European countries and regions so as to arrive at a more complete European picture about cross-regional variation in intergenerational co-residence. We are aware that our results may have been different if we would have been able to include Southern European countries in our analysis. Previous literature has shown that differences between regions are pronounced in Italy and Spain (e.g., Santarelli and Cottone 2009; Vitali 2010).

Despite limitations, our analysis contributes new information to current literature concerned with explaining cross-regional differences in young adults' living arrangements by adopting a comprehensive, multilevel approach. Explanations that solely focus on individual level characteristics ignore the power of regional contextual backgrounds in influencing intergenerational co-residence. Besides regional socioeconomic and sociocultural contexts there are other national and regional structural factors framing intergenerational co-residence and the adoption of a multilevel approach is a useful tool for future research to disentangle the relative importance of each factor for cross-regional differences.

Figure 3.5 Cross-level Interaction Effect of Familialistic Norms by Familialistic Preferences (A) and by Income (B) for Young Adults' Probability to Live with Parents



Source: GGS Wave 1 (2004–2011). Own calculations.

Note: The predicted probability is represented on the y-axis; the values of familialistic preferences and income, respectively, are graphed on the x-axis. Regional familialistic norms are color coded at two standard deviations below the mean (= Very weak), one standard deviation below the mean (= Weak), the mean (= Moderate), one standard deviation above the mean (= Strong), and two standard deviations above the mean (= Very strong).

Familialistic preferences are labeled from 0 (= Very weak) to 4 (= Very strong) in panel A. Income (ln. std.) is labeled from -2 (SD) to +2 (SD) in panel B.

Notes

1. The GGS Contextual Database provides open access to comparable, aggregated contextual data, containing demographic and economic indicators, which can be linked to the individual level data of the GGS. <http://www.ggp-i.org/cdb/contextual-database.html>.
2. Note that it was not possible to estimate these rates for Hungary and Poland, due to unavailability of information.
3. The included countries are: Austria, Belgium, Bulgaria, Czech Republic, Estonia, France, Georgia, Germany, Hungary, Lithuania, Norway, Poland, Romania, and Russia. We had to exclude Italy (no income variable), and the Netherlands (too few items measuring familialistic values and attitudes).
4. Additionally we ran our models with non-imputed income and the results are stable with imputation.
5. We consider personal income and not only income from employment because social security income, for example, may also provide a stable source of income. In previous analyses, we ran our models with different indicators of the young adults' resources: education and employment status. They are not included in our final model because they correlate with income and school enrollment.
6. The reliability coefficients (as measured by Cronbach's alpha) vary between .49 and .75 for the countries in our study. Table 3.6 in the Appendix 3 provides additional information about the scale and the scoring procedures. Because we are studying cross-regional differences, we are also interested in how much variation there is across regions. We note that although it is greater across countries, there is nonetheless enough variation in familialistic norms across regions.

Table 3.3 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents by Sex and Partnership Status

	Sex						Partnership status					
	Women			Men			No partner			Partner		
	b		s.e.	b		s.e.	b		s.e.	b		s.e.
Intercept	0.93	***	0.23	1.06	***	0.28	0.78	**	0.29	−0.64	**	0.22
Individual level												
Familialistic preferences	0.15	**	0.05	0.30	***	0.05	0.39	***	0.05	0.11	*	0.04
Income (ln. std.)	−0.19	***	0.03	−0.18	***	0.03	−0.19	***	0.03	−0.15	***	0.03
Student	0.13	*	0.05	−0.04		0.05	−0.13	*	0.05	0.27	***	0.05
Having a partner	−1.22	***	0.04	−1.11	***	0.04						
Having young children	−1.75	***	0.06	−1.48	***	0.06	0.53		0.31	−1.38	***	0.04
Single parent	1.07	***	0.08	1.17	***	0.12	−1.64	***	0.30	1.92	***	0.09
Male							−0.65	***	0.03	0.79	***	0.04
Age (std.)	−0.71	***	0.02	−0.74	***	0.02	0.27	***	0.02	−0.77	***	0.02
Age (std. sq.)	0.23	***	0.02	0.29	***	0.02	0.33	***	0.04	0.30	***	0.02
Mother has high education	−0.19	***	0.05	−0.23	***	0.05	−0.32	***	0.05	−0.14	**	0.05
Poor health	0.19	**	0.05	0.20	***	0.06	0.31	***	0.06	0.11	*	0.05
Country (ref. = Bulgaria)												
Russia	−0.31		0.23	−0.81	**	0.27	−0.79	**	0.30	−0.32		0.20

Table 3.3 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents by Sex and Partnership Status (cont.)

	Sex						Partnership status					
	Women			Men			No partner			Partner		
	b		s.e.	b		s.e.	b		s.e.	b		s.e.
Georgia	0.82		0.44	1.41	**	0.49	0.82		0.53	1.47	***	0.38
Germany	−2.64	***	0.33	−2.18	***	0.41	−2.32	***	0.42	−2.48	***	0.34
France	−3.04	***	0.33	−3.19	***	0.40	−3.38	***	0.40	−2.87	***	0.33
Hungary	−0.26		0.16	−0.42	*	0.21	−0.16		0.25	−0.30	*	0.14
Romania	−0.82	**	0.26	−1.06	***	0.28	−1.07	**	0.33	−0.57	*	0.22
Norway	−3.66	***	0.59	−3.20	***	0.72	−3.56	***	0.72	−3.50	***	0.60
Austria	−1.68	***	0.40	−1.04	*	0.52	−1.52	**	0.54	−1.51	***	0.42
Estonia	−1.31	***	0.18	−1.20	***	0.23	−1.08	***	0.24	−1.50	***	0.17
Belgium	−1.21	***	0.35	−0.96	*	0.42	−1.02	*	0.43	−1.27	***	0.35
Lithuania	−1.36	***	0.18	−2.14	***	0.21	−2.01	***	0.22	−1.48	***	0.15
Poland	−0.96	***	0.26	−1.00	**	0.29	−1.01	**	0.32	−0.81	***	0.23
Czech Republic	−0.55	*	0.27	−0.85	**	0.32	−0.89	**	0.34	−0.44		0.25
Regional level												
Familialistic norms ^a	0.99		0.51	0.55		0.57	1.15		0.60	−0.04		0.46
% Youth unemployment ^a	0.00		0.01	0.00		0.01	0.00		0.00	0.00		0.00

Table 3.3 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents by Sex and Partnership Status (cont.)

	Sex						Partnership status					
	Women			Men			No partner			Partner		
	b		s.e.	b		s.e.	b		s.e.	b		s.e.
% Owner-occupied households ^a	0.01	**	0.00	0.02	***	0.00	0.02	***	0.00	0.01	***	0.00
Mean youth income ^a	0.00	*	0.00	0.00		0.00	0.00	*	0.00	0.00	**	0.00
Cross-level interactions												
Familialistic preferences x Familialistic norms	-0.48	**	0.15	0.12		0.17	-0.20		0.17	-0.02		0.14
Income x Familialistic norms	0.30	**	0.09	0.21	*	0.10	0.16		0.10	0.09	*	0.00
Variance of random effects												
var(Intercept)	0.05		0.04	0.14		0.09	0.12		0.11	0.05		0.04
var(Familialistic preferences)	0.04		0.02	0.06		0.03	0.03		0.03	0.03		0.02
-2logL	-18653.83			-18509.72			-15326.92			-21695.02		
N	24,381			21,004			16,207			29,178		

Source: GGS Wave 1 (2004–2011).

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. (No weight used) ^a Grand-mean centered.

Table 3.4 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents by Age Group

	Age group					
	18–24 years old			25–35 years old		
	b		s.e.	b		s.e.
Intercept	1.31	***	0.36	0.59	*	0.24
Individual level						
Familialistic preferences	0.22	***	0.05	0.26	***	0.05
Income (ln. std.)	–0.18	***	0.03	–0.17	***	0.03
Student	0.07		0.05	0.06		0.06
Having a partner	–0.91	***	0.04	–1.42	***	0.04
Having young children	–2.14	***	0.09	–1.43	***	0.05
Single parent	1.40	***	0.16	0.93	***	0.07
Male	0.47	***	0.04	0.71	***	0.04
Age (std.)	0.69		0.41	–0.66	***	0.06
Age (std. sq.)	0.90	***	0.17	0.16	**	0.05
Mother has high education	–0.21	***	0.05	–0.21	***	0.05
Poor health	0.21	**	0.07	0.14	**	0.05
Country (ref. = Bulgaria)						
Russia	–0.42		0.29	–0.18		0.20
Georgia	1.27	*	0.53	1.50	***	0.38
Germany	–2.30	***	0.42	–2.78	***	0.37
France	–3.17	***	0.40	–3.17	***	0.37
Hungary	0.06		0.25	–0.54	***	0.14
Romania	–0.74	*	0.31	–0.61	**	0.21
Norway	–4.01	***	0.72	–3.59	***	0.69
Austria	–1.52	**	0.51	–1.48	**	0.46
Estonia	–1.15	***	0.24	–1.14	***	0.15
Belgium	–0.61		0.43	–1.64	***	0.39
Lithuania	–1.74	***	0.22	–1.55	***	0.14
Poland	–1.12	**	0.32	–0.49	*	0.23

Table 3.4 Young Adults' (Aged 18–35) Intergenerational Co-residence with Parents by Age Group (cont.)

	Age group					
	18–24 years old			25–35 years old		
	b		s.e.	b		s.e.
Czech Republic	–0.33		0.35	–0.77	**	0.25
Regional level						
Familialistic norms ^a	0.72		0.57	0.59		0.49
% Owner-occupied households ^a	0.02	***	0.00	0.02	***	0.00
% Youth unemployment ^a	0.00		0.01	0.00		0.00
Mean youth income ^a	0.00	***	0.00	0.00		0.00
Cross-level interactions						
Familialistic preferences x Familialistic norms	–0.22		0.16	–0.32	*	0.14
Income x Familialistic norms	0.03		0.11	0.42	***	0.09
Variance of random effects						
var(Intercept)	0.00		0.02	0.14		0.08
var(Familialistic preferences)	0.02		0.02	0.03		0.02
var(Income (ln. std.))	0.03		0.01	0.03		0.01
–2logL	–14517.58			–22433.05		
N	14,941			30,444		

Source: GGS Wave 1 (2004–2011).

Note: *p < 0.05, **p < 0.01, ***p < 0.001. (No weight used) ^a Grand-mean centered.

7. Additionally we ran our models with an alternative measure (sum score of the item “When children turn about 18–20 years they should live independently”). The results were not different.

8. As the total sample size for each level in a multilevel model is crucial to the statistical power the model yields – and researchers usually try to

have as many observations on the highest level as possible – we decided against a three-level design, given the rather small sample size of countries available from the GGS (14 countries).

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Appendix to Chapter 3**Table 3.5 Total Number of Respondents per Country per NUTS Regions**

Regions	N	%	% Co-residing with parents
Austria			
Eastern Austria	1,148	2.53	28.48
Southern Austria	558	1.23	32.80
Western Austria	1,084	2.39	34.87
Belgium			
Flanders	1,035	2.28	39.23
Brussels	205	0.45	29.76
Wallonia	676	1.49	36.83
Bulgaria			
Northern and Eastern Bulgaria	2,619	5.77	47.69
South-Western and South-Central Bulgaria	2,335	5.14	53.32
Czech Republic			
Prague	585	1.29	49.57
Central Bohemia	350	0.77	42.86
Southwest Czech Republic	419	0.92	32.22
Northwest Czech Republic	373	0.82	25.74
Northeast Czech Republic	447	0.98	43.85
Southeast Czech Republic	404	0.89	35.40
Central Moldavia	446	0.98	44.84
Moravskoslezsko	499	1.10	35.47
Estonia			
Northern Estonia	816	1.80	27.57
Western Estonia	228	0.50	21.93
Central Estonia	203	0.45	23.65
Northeastern Estonia	261	0.58	31.42
Southern Estonia	608	1.34	27.80

Table 3.5 Total Number of Respondents per Country per NUTS Regions (cont.)

Regions	N	%	% Co-residing with parents
France			
Ile-de-France	478	1.05	16.74
Bassin Parisien	482	1.06	18.26
Nord-Pas-de-Calais	220	0.48	16.82
Eastern France	291	0.64	16.49
Western France	447	0.98	16.11
South-West France	273	0.60	18.32
Central-East France	322	0.71	16.15
Méditerranée	276	0.61	23.19
Georgia			
Tbilisi	892	1.97	64.35
Kakheti	274	0.60	55.47
Mtckheta-Mtianeti	95	0.21	67.37
Shida-Kartli	222	0.49	57.66
Qvemo-Kartli	327	0.72	54.74
Samtckhe-Javakheti	142	0.31	59.15
Racha-Lechkhumi and Qvemo Svaneti	47	0.10	72.34
Imereti	545	1.20	67.71
Guria	105	0.23	72.38
Samegrelo and Zemo Svaneti	285	0.63	67.37
Adjara	241	0.53	59.34
Germany			
Schleswig-Holstein	98	0.22	20.41
Hamburg	60	0.13	13.33
Niedersachsen	252	0.56	16.27
Bremen	21	0.05	4.76
Nordrhein-Westfalen	468	1.03	18.59

Table 3.5 Total Number of Respondents per Country per NUTS Regions (cont.)

Regions	N	%	% Co-residing with parents
Hessen	196	0.43	15.82
Rheinland-Pfalz	122	0.27	19.67
Baden-Württemberg	329	0.72	18.54
Bayern	377	0.83	21.75
Saarland	28	0.06	28.57
Berlin	154	0.34	11.04
Brandenburg	84	0.19	20.24
Mecklenburg-Vorpommern	59	0.13	10.17
Sachsen	132	0.29	13.64
Sachsen-Anhalt	74	0.16	9.46
Thüringen	53	0.12	16.98
Hungary			
Central Hungary	956	2.11	41.74
Transdanubia	1,296	2.86	44.37
Great Plain and North Hungary	1,819	4.01	40.19
Lithuania			
Alytus County	122	0.27	19.67
Kaunas County	596	1.31	39.77
Klaipeda County	411	0.91	30.66
Marijampole County	76	0.17	28.95
Panevezys County	177	0.39	40.11
Siauliai County	316	0.70	33.23
Taurage County	134	0.30	35.82
Telsiai County	143	0.32	33.57
Utena County	121	0.27	41.32
Vilnius County	982	2.16	34.52

Table 3.5 Total Number of Respondents per Country per NUTS Regions (cont.)

Regions	N	%	% Co-residing with parents
Norway			
Oslo and Akershus	1,216	2.68	15.79
Hedmark and Oppland	208	0.46	21.63
South Eastern Norway	427	0.94	21.08
Agder and Rogaland	706	1.56	19.12
Western Norway	525	1.16	18.67
Trøndelag	549	1.21	14.39
Northern Norway	417	0.92	16.31
Poland			
Region Centralny	969	2.14	33.33
Region Poludniowy	927	2.04	38.83
Region Wschodni	1,099	2.42	43.31
Region Polncno-Zachodni	923	2.03	36.73
Region Poludniowo-Zachodni	574	1.26	36.06
Region Polnocny	974	2.15	36.86
Romania			
Macroregion 1 - Romania	681	1.50	43.76
Macroregion 2 - Romania	786	1.73	37.28
Macroregion 3 - Romania	704	1.55	42.47
Macroregion 4 - Romania	599	1.32	35.56
Russia			
Moscow Oblast	137	0.30	36.50
Komi Republic	213	0.47	34.27
Saratov Region	166	0.37	27.71
Smolensk Region	113	0.25	30.97
Tver Region	67	0.15	26.87
Tula Region	64	0.14	39.06

Table 3.5 Total Number of Respondents per Country per NUTS Regions (cont.)

Regions	N	%	% Co-residing with parents
Kaluga Region	75	0.17	24.00
Nizhniy Novgorod	83	0.18	31.33
Chuvashia Region	48	0.11	37.50
Penza Region	45	0.10	24.44
Lipetsk Region	79	0.17	40.51
Tambov Region	63	0.14	25.40
Republic of Tatarstan	77	0.17	40.26
Krasnodar Kray	148	0.33	33.78
Chelyabinsk Region	168	0.37	32.14
Volgograd Region	48	0.11	14.58
Kabardino-Balkarskaya Republic	89	0.20	48.31
Rostov Region	74	0.16	45.95
Stavropolskiy Kray	72	0.16	37.50
Kurgan Oblast	88	0.19	36.36
Chelyabinsk Region	168	0.37	32.14
Republic of Udmurtia	91	0.20	48.35
Orenburg Region	92	0.20	20.65
Perm Region	82	0.18	25.61
Total	45,385	100.00	36.05

Source: GGS Wave 1 (2004–2011). Own calculations.

Table 3.6 Reliability Coefficients 10-item Scale “Familialistic Preferences”

	Total*	BG	RU	GE	DE	FR	HU	RO
n	43216	4878	2176	3175	2500	2780	4057	2770
Item	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
1.	0.70	0.58	0.52	0.62	0.71	0.64	0.49	0.65
2.	0.66	0.55	0.48	0.60	0.68	0.615	0.47	0.64
3.	0.69	0.57	0.46	0.61	0.70	0.60	0.45	0.64
4.	0.70	0.58	0.52	0.64	0.70	0.61	0.53	0.68
5.	0.67	0.55	0.49	0.62	0.68	0.58	0.48	0.64
6.	0.66	0.55	0.48	0.62	0.67	0.57	0.46	0.64
7.	0.60	0.61	0.51	0.63	0.70	0.60	0.51	0.66
8.	0.70	0.53	0.52	0.62	0.70	0.61	0.53	0.69
9.	0.73	0.61	0.60	0.67	0.73	0.67	0.58	0.70
10.	0.68	0.58	0.56	0.64	0.70	0.61	*	0.68
Test scale	0.71	0.60	0.54	0.65	0.72	0.64	0.53	0.68
	Total*	NO	AT	EE	BE	LT	PL	CZ
n	43216	2545	2783	1663	1916	3074	5454	3445
Item	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
1.	0.70	0.73	0.76	0.54	0.76	0.48	0.68	0.61
2.	0.66	0.68	0.72	0.49	0.72	0.48	0.66	0.60
3.	0.69	0.70	0.72	0.50	0.72	0.49	0.66	0.60
4.	0.70	0.69	0.73	0.47	0.75	0.52	0.68	0.62
5.	0.67	0.70	0.71	0.39	0.70	0.49	0.68	0.60
6.	0.66	0.70	0.71	0.37	0.70	0.48	0.67	0.51
7.	0.60	0.67	0.73	0.42	0.72	0.52	0.68	0.61
8.	0.70	0.69	0.74	*	0.73	0.53	0.69	0.61
9.	0.73	0.74	0.77	0.48	0.75	0.58	0.73	0.64
10.	0.68	0.67	0.72	0.45	0.72	0.55	0.69	0.61
Test scale	0.71	0.72	0.75	0.49	0.75	0.54	0.71	0.63

Source: GGS Wave 1 (2004–2011).

Note: *Based on cases without missing values. ** Constant in analysis sample, dropped from analysis. BG = Bulgaria, RU = Russia, GE = Georgia, DE = Germany, FR = France, HU = Hungary, RO = Romania, NO = Norway, AT = Austria, EE = Estonia, BE = Belgium, LT = Lithuania, PL = Poland, CZ = Czech Republic.

Item 1 = Marriage is outdated institution, Item 2 = It is all right for an unmarried couple to live together, Item 3 = Marriage is a lifetime relationship and should never be ended, Item 4 = It's all right for a couple to divorce even if they have children, Item 5 = A woman has to have children in order to be fulfilled, Item 6 = A man has to have children in order to be fulfilled, Item 7 = A child needs a home with father and mother to grow up happily, Item 8 = Woman can have child as single parent even without stable relationship, Item 9 = When children turn about 18-20 years they should live independently, Item 10 = Homosexual couples should have same rights as heterosexual.

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Austria								
Eastern Austria	23.60	35.53	51.85	19.30	38.31	23.19	62.78	13.32
Southern Austria	25.00	44.59	56.08	24.39	37.14	30.17	58.60	19.89
Western Austria	26.83	46.50	64.82	23.04	44.65	29.72	71.03	16.97
Belgium								
Flanders	31.87	48.18	75.64	26.05	74.48	25.50	84.91	17.07
Brussels	26.73	32.69	52.70	16.79	47.87	14.41	65.67	12.32
Wallonia	28.38	47.06	70.00	22.90	59.61	23.04	76.92	15.61
Bulgaria								
Northern and Eastern Bulgaria	37.09	61.53	84.21	24.88	50.91	44.44	73.37	35.86
South-Western and South-Central Bulgaria	43.63	66.23	86.98	32.85	59.21	48.66	79.05	38.72
Czech Republic								
Prague	49.16	50.00	68.46	36.34	72.73	19.61	71.89	19.03

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Central Bohemia	38.76	47.09	68.35	26.07	55.17	34.15	80.95	21.43
Southwest Czech Republic	26.40	37.39	56.88	16.99	44.90	25.37	64.08	21.84
Northwest Czech Republic	21.97	29.00	38.96	16.44	38.67	17.04	46.46	15.04
Northeast Czech Republic	34.16	55.39	76.19	24.37	60.10	29.71	76.50	21.21
Southeast Czech Republic	28.28	42.23	62.18	18.55	49.06	26.53	68.35	18.11
Central Moldavia	38.29	51.34	75.90	20.72	60.85	30.34	77.53	23.13
Moravskoslezsko	34.92	36.03	60.21	20.13	55.09	20.49	72.19	16.67
Estonia								
Northern Estonia	23.02	34.94	54.82	11.65	30.56	26.73	51.72	19.58
Western Estonia	13.95	32.32	48.05	8.61	23.94	21.02	40.91	17.39
Central Estonia	16.67	33.73	66.67	5.59	26.79	22.45	40.00	18.30

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Northeastern Estonia	25.48	40.38	65.38	8.92	28.09	33.14	50.00	26.57
Southern Estonia	20.16	39.83	61.54	8.53	34.78	24.19	54.48	19.44
France								
Ile-de-France	15.90	17.95	30.56	10.78	39.87	5.31	45.65	5.00
Bassin Parisien	17.68	19.30	33.33	10.84	29.80	10.21	40.88	4.65
Nord-Pas-de-Calais	12.50	22.00	36.67	9.38	28.72	7.94	45.31	5.13
Eastern France	16.67	16.26	32.29	8.72	27.64	8.33	33.33	6.99
Western France	13.52	19.21	30.56	9.24	35.12	4.66	39.51	2.81
South-West France	17.39	19.64	31.40	12.30	27.62	12.50	38.30	7.82
Central-East France	15.31	17.46	30.53	10.13	31.54	5.73	36.94	5.21
Méditerranée	20.73	26.79	42.86	12.36	36.96	9.42	48.51	8.57

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Georgia								
Tbilisi	51.19	78.55	90.24	37.87	62.92	66.87	83.38	51.05
Kakheti	39.07	75.61	91.45	28.66	52.07	60.95	78.89	44.02
Mtckheta-Mtianeti	50.00	82.35	91.11	46.00	63.64	72.50	90.63	55.56
Shida-Kartli	37.60	83.51	94.68	30.47	54.55	62.22	75.31	47.52
Qvemo-Kartli	37.43	75.68	90.14	27.57	55.56	52.69	77.37	38.42
Samtckhe-Javakheti	30.99	87.32	95.08	32.10	53.19	70.83	80.70	44.71
Racha-Lechkhumi and Qvemo Svaneti	65.38	80.95	90.91	28.57	73.53	69.23	92.86	63.64
Imereti	49.12	87.79	93.62	36.44	65.65	73.03	85.48	58.50
Guria	57.89	89.58	98.15	45.10	72.06	72.97	88.89	63.77
Samegrelo and Zemo Svaneti	53.52	81.12	92.77	31.93	68.78	63.75	91.11	56.41

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Adjara	40.00	80.17	92.98	29.13	57.49	63.51	77.01	49.35
Germany								
Schleswig-Holstein	22.41	17.50	36.11	11.29	34.62	4.35	48.48	6.15
Hamburg	16.13	10.34	23.08	5.88	13.79	12.90	40.00	0.00
Niedersachsen	10.22	23.48	36.14	6.51	21.85	11.28	48.57	3.85
Bremen	0.00	6.67	11.11	0.00	8.33	0.00	20.00	0.00
Nordrhein-Westfalen	15.35	22.43	35.12	9.33	30.39	9.47	41.83	7.30
Hessen	9.40	25.32	30.30	8.46	22.58	9.71	37.68	3.94
Rheinland-Pfalz	16.67	22.58	42.11	9.52	30.19	11.59	44.68	4.00
Baden-Württemberg	12.07	25.81	37.93	7.98	26.09	11.31	43.80	3.85
Bayern	11.98	35.00	40.50	12.89	29.35	14.51	57.14	5.43
Saarland	20.00	38.46	27.27	29.41	43.75	8.33	60.00	11.11
Berlin	10.98	11.11	19.61	6.80	12.90	8.20	16.42	6.90

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Brandenburg	13.64	27.50	31.43	12.24	24.07	13.33	33.33	8.89
Mecklenburg-Vorpommern	2.86	20.83	13.64	8.11	14.29	4.17	23.81	2.63
Sachsen	7.35	20.31	32.43	6.32	15.25	12.33	31.11	4.60
Sachsen-Anhalt	6.82	13.33	22.22	5.36	12.82	5.71	23.81	3.77
Thüringen	17.14	16.67	42.86	7.69	23.33	8.70	36.36	3.23
Hungary								
Central Hungary	34.30	49.26	70.29	25.25	47.29	39.47	77.42	31.26
Transdanubia	36.53	52.71	82.35	22.32	48.18	42.58	82.19	31.97
Great Plain and North Hungary	33.09	47.93	79.97	19.92	44.39	37.74	71.56	30.30
Lithuania								
Alytus County	15.49	25.49	51.35	5.88	28.57	15.00	53.57	9.57
Kaunas County	43.77	36.19	69.87	20.98	60.39	24.34	62.74	21.62
Klaipeda County	27.27	33.80	56.21	12.81	54.97	16.54	55.31	11.64

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Marijampole County	11.11	38.78	76.19	10.91	46.43	18.75	59.09	16.67
Panevezys County	35.37	44.21	62.50	24.76	71.93	25.00	75.86	22.69
Siauliai County	31.37	34.97	61.11	14.74	45.38	24.73	50.00	21.81
Taurage County	39.06	32.86	56.45	18.06	49.30	20.63	61.11	18.75
Telsiai County	25.00	41.33	59.70	10.53	58.73	13.75	60.32	12.50
Utena County	38.60	43.75	74.55	13.64	62.26	25.00	65.45	21.21
Vilnius County	31.78	36.84	58.52	17.68	53.98	20.28	54.00	17.15
Norway								
Oslo and Akershus	12.28	19.62	25.43	9.92	27.07	11.01	42.36	5.18
Hedmark and Oppland	16.16	26.61	35.14	14.18	36.23	14.39	47.22	8.09
South Eastern Norway	15.45	27.05	48.36	10.16	33.09	15.28	57.14	5.98

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Agder and Rogaland	13.27	24.08	37.19	9.70	32.86	13.31	49.15	4.04
Western Norway	12.54	25.61	38.37	9.07	26.15	14.24	43.93	6.25
Trøndelag	11.72	17.03	29.15	6.00	20.49	10.76	37.06	1.70
Northern Norway	11.94	20.37	26.06	11.27	22.56	13.38	32.28	6.56
Poland								
Region Centralny	32.48	34.27	67.35	14.94	49.14	24.39	64.57	19.19
Region Poludniowy	32.89	46.63	72.78	18.34	49.23	31.21	67.18	23.68
Region Wschodni	34.37	56.07	81.01	18.43	53.18	33.98	70.74	28.05
Region Polnocno-Zachodni	32.35	43.01	69.46	18.17	49.25	27.06	67.38	23.24
Region Poludniowo-Zachodni	27.44	46.69	67.87	16.15	46.70	29.11	62.90	23.20
Region Polnocny	30.21	43.32	68.00	19.39	48.87	28.52	67.07	21.09

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Romania								
Macroregion 1 - Romania	31.75	54.10	83.41	25.22	55.74	37.07	81.12	28.66
Macroregion 2 - Romania	24.27	49.39	81.89	15.98	39.23	36.00	77.27	23.81
Macroregion 3 - Romania	29.27	53.99	84.79	23.61	51.15	37.39	78.57	29.89
Macroregion 4 - Romania	24.14	46.28	70.94	17.42	47.06	27.98	68.05	22.79
Russia								
Moscow Oblast	28.57	46.67	76.67	25.23	35.00	37.66	59.57	24.44
Komi Republic	35.45	33.01	62.07	23.87	52.73	27.85	60.56	21.13
Saratov Region	24.49	32.35	56.25	20.90	29.23	26.73	40.74	21.43
Smolensk Region	23.33	39.62	48.28	25.00	32.73	29.31	36.00	26.98
Tver Region	20.51	35.71	61.11	14.29	50.00	19.61	50.00	17.02
Tula Region	33.33	50.00	81.82	30.19	37.50	40.00	60.87	26.83

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Kaluga Region	16.00	40.00	81.25	8.47	36.84	19.64	61.11	12.28
Nizhniy Novgorod	29.79	33.33	60.00	25.00	28.57	32.73	44.44	25.00
Chuvashia Region	32.14	45.00	64.71	22.58	45.45	30.77	61.54	28.57
Penza Region	27.59	18.75	77.78	11.11	50.00	12.90	70.00	11.43
Lipetsk Region	46.15	35.00	78.57	32.31	56.67	30.61	76.00	24.07
Tambov Region	17.65	34.48	52.94	15.22	47.83	12.50	66.67	12.50
Republic of Tatarstan	36.11	43.90	75.00	28.07	50.00	34.69	58.06	28.26
Krasnodar Kray	31.03	37.70	57.69	28.69	57.14	19.57	70.21	16.83
Chelyabinsk Region	23.47	44.29	68.42	21.54	36.36	30.09	53.73	17.82
Volgograd Region	15.38	13.64	57.14	7.32	6.67	18.18	50.00	7.50
Kabardino-Balkarskaya Republic	33.33	68.42	87.88	25.00	50.00	45.16	75.00	36.07
Rostov Region	42.50	50.00	82.35	35.09	48.48	43.90	68.75	28.57

Table 3.7 Young Adults (Aged 18–35) Living with at least one Parent, % per NUTS 1 Region and by Different Social Groups (cont.)

Region	Sex		Partnership status		Working status		Age group	
	Women	Men	No partner	Partner	Not employed	Employed	18–24	25–35
Stavropolskiy Kray	34.78	42.31	75.00	26.79	42.86	32.43	64.71	29.09
Kurgan Oblast	38.78	33.33	64.71	29.58	69.23	22.58	68.57	15.09
Republic of Udmurtia	42.31	56.41	74.07	37.50	69.44	34.55	79.41	29.82
Orenburg Region	18.18	22.92	66.67	11.69	34.62	15.15	33.33	16.18
Perm Region	20.93	30.77	81.25	12.12	50.00	17.74	45.83	17.24
Total	29.13	44.09	65.96	19.44	47.17	28.26	64.10	22.28

Source: GGS Wave 1 (2004–2011). Own calculations.